BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK : CONSTRUCTION OF CULVERTS AND IMPROVEMENTS OF DRAINS AT PUTTENAHALLI KHB COLONY IN WARD NO.02 OF YELAHANKA SUB-DIVISION

Estimate Cost Rs. 25.00 Lakhs

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
1	**Removing B.S. slab** of Drain and stacking (P No.25 / I N 5.32)								
	for Drain	Sqm							
	Isack Layout Main Road		1	303.00	1.50		454.50		
							454.50	65.72	**29869.74**
	Basic Rate	62.00							
	Area Weightage @ 6%	3.72							
	Total	**65.72**							
2	KSRRB 300 - Excavation for road, drains and similar works - KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH Chapter 3 (P.142/I.19.1)								
	Desilting for Drain	Cum							
	Isack Layout Main Road		1	362.00	0.60	0.80	173.76		
							173.76	86.92	**15103.22**
	Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
3	KSRB 2-2.1 : **Earth work excavation** for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No. KBS 2.1(a) / 2.3.5, No.5/Item No. 2.3)								
		Cum							
	for culvert		1	6.80	1.80	1.20	14.69		
							14.69	200.34	**2942.59**
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Total	200.34							
4	KSRB 2-1.1 : Earthwork in surface excavation in **ordinary soil** for **levelling and lowering** the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1 (a) / 2.3.1 (P.5/I.2.1)								
	berm cutting	Cum							
			2	305.00	1.50	0.30	274.50		
							274.50	166.42	**45682.29**
	Basic Rate	157.00							
	Area Weightage @ 6%	9.42							
	Total	**166.42**							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
5	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregate /sand/kaner/ Moorum KSRRB M100-1 Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications MORTH -100/ Chapter 1 (Page No 133/ Item No 17.1)								
		Cum							
			Qty Vide Item No.2+3+4				462.95	100.00	46294.80
	Average Weight of Earth 1.28 Tonne/Km								
	Basic Rate Lead Charges for 10.00 Kms (2.50X1.28X10.00)	32.00							
	Add loading and unloading Item No 17.1)	68.00							
	Total	**100.00**							
6	**Refixing stone slabs** of drains and pointing in C.M.(1:3)(P.No 25/I.No.5.33)								
		Sqm							
			75% of Qty Vide Item No.1				340.88	80.56	27460.89
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							
7	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc , complete 7.5 cms thick (Page No.25, Item No. 5.31.1)								
		Sqm							
			25% of Qty Vide Item No.1				113.63		
			1	114.00	1.50		171.00		
							284.63	665.68	**189469.17**
	Basic Rate	628.00							
	Area Weightage @ 6%	37.68							
	Total	**665.68**							
8	KSRB 4-1.3. Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.3)								
		Cum							
	for culverts		1	6.80	1.80	0.15	1.84		
	for drain		2	362.00	0.20	0.15	21.72		
			1	362.00	0.20	0.15	10.86		
			1	107.00	0.60	0.15	9.63		
							44.05	5159.02	**227234.19**
	Basic Rate	4867.00							
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
9	KSRB 5-11 : Providing and constructing load bearing wall with cement concrete cavities blocks (hollow blocks) of proportion 1:1.5:3 blocks of size 40x20x20cms.(lxbxh) strength not less than 3.5 Newton per sqmm with cement mortar 1:4 conforming to I.S.2185 of 1967 having not less than 40mm shell thickness with two or more large cavities and having solid material between including cost of materials, labour charges, scaffoldings, curing complete as per specifications. KBS No.5.4 (P.24 / I.N.5.25)								
	for Drain	Sqm							
	Isack Layout Main Road		2	422.00		0.40	337.60		
							337.60	974.14	**328869.66**
	Basic Rate	919.00							
	Area Weightage @ 6%	55.14							
	Total	**974.14**							
10	KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 (Page No. 23/ Item No. 5.6)								
	for Culverts	Cum							
			2	6.80	0.60	0.80	6.53		
							6.53	4438.22	**28972.70**
	Basic Rate	4187.00							
	Area Weightage @ 6%	251.22							
	Total	**4438.22**							
11	KSRB 15.1.1: Providing **flush pointing** to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications (Page No.113/Item No. 15.1)								
		Sqm							
	for Drain		2	422.00		0.40	337.60		
	for culverts		2	6.80		0.80	10.88		
							348.48	102.82	**35830.71**
	Basic Rate	97.00							
	Area Weightage @ 6%	5.82							
	Total	**102.82**							
12	KSRB 4-1.7 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs with 20mm and down size graded granite metal coarse aggregate @ 0.84cum and fine aggregate @ 0.56 cum machine mixed concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2 (P No. 13 / Item No.4.7)								
		Cum							
	for Drain, coping		2	422.00	0.20	0.10	16.88		
	for culverts, coping		2	6.80	0.60	0.10	0.82		
	vent		1	6.80	0.60	0.10	0.41		
			1	95.00	0.60	0.10	5.70		
							23.80	5598.92	**133276.69**
	Basic Rate	5282.00							
	Area Weightage @ 6%	316.92							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
	Total	**5598.92**							
13	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **flat surface** such as suspended floors, roofs, landings, balconies and likes, **thickness upto 200 mm** including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 (Page No. 15/ Item No. 4.18)								
		Sqm							
			1	6.80	0.60		4.08		
							4.08	331.78	**1353.66**
	Basic Rate	313.00							
	Area Weightage @ 6%	18.78							
	Total	**331.78**							
14	KSRB 4.9.2. Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **-do- TMT Bars Fe 500** P.17/It.No.4.46.2								
		tonne	No.of Bars	Width/Lengt	Rmtr	Kg/Rmtr	Total In Kg		
	16mm dia main bar spacing at 150mm c/c	2	44	1.50	132.00	1.580	208.56		
	10mm dia dist bar spacing at 150mm c/c	2	10	6.00	120.00	0.617	74.04		
	16mm dia cranked bar spacing at 300mmc/c	2	20	1.80	72.00	1.580	113.76		
						in Kg	396.36		
						in Qtl	3.9636		
						in tonne	**0.3964**	59413.00	**23548.94**
	Basic Rate	56050.00							
	Area Weightage @ 6%	3363.00							
	Total	**59413.00**							
15	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.21 (P.15 / I.4.31)								
		Sqm							
			2	1.50		0.23	0.69		
			2	6.80		0.23	3.13		
							3.82	310.58	**1185.79**
	Basic Rate	293.00							
	Area Weightage @ 6%	17.58							
	Total	**310.58**							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
16	Providing & laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs , with 20mm and down size graded granite metal,coarseaggregated @ 0.69cum ,and fine aggregated @ 0.460cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed -2008 machine mixed concrete laid in layers not exceeding 15 crns thick, vibrated for all works in foundation for footings,pedestals,retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts,struts, buttresses, bed blocks, anchor blocks, plinths etc.,including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications.specifications No.KBS 4.1,4.6 (P.No.13/ I.No.4.11)								
	deck slab	Cum							
	for culvert		1	6.80	1.50	0.23	2.35		
							2.35	6371.66	**14947.91**
	Basic Rate	6011.00							
	Area Weightage @ 6%	360.66							
	Total	**6371.66**							
17	Providing and fixing **RCC precast Slabs of 0.10 m thick of CC 1:2:4 with 20 mm** and down size graded granite metal , machine mixed , including cost of all material , labour , HOM of Machinery , curing complete								
		Sqm							
	for Drain covering slab		1	422.00	1.00		422.00		
			-1	22.70	1.00		-22.70		
							399.30	2100.00	**838530.00**
	Data Rate	**2100.00**							
18	5.29(b)Providing and fixing **pre cast solid cement concrete kerb stones** made out of No.272.21 C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete (P.No.25 /It.No.5.30)								
		No							
			1	395.00		395.00 / 0.45	877.78		
						Say	**870.00**	331.78	**288648.60**
	Basic Rate	313.00							
	Area Weightage @ 6%	18.78							
	Total	**331.78**							
19	KSRB 15-19.2 Providing and applying **ready mix priming coat** over concrete/masonry/asbestos cement sheet/plastered surfaces including preparing the surface after throughly cleaning of oil,grease,dirt and other foreign matter and sand papering including cost of materials, labour, complete as per specifications. (Page no.121 / It no.15.80)								
		Sqm							
			1	390.00		0.40	156.00		
							156.00	27.56	**4299.36**
	Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	**27.56**							

Sl. No.	Description of Item	Unit	No.	L	B	D	Qty.	Rate	Amount
20	KSRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. (Page No.182 & Item No.24.1)								
		Sqm					156	63.60	9924.60
	Qty Vide Item No.19						138.00	64.80	8942.40
	Basic Rate	60.00							
	Area Weightage @ 6%	4.80	3.60						
	Total	64.80	63.60						22934442
						Sub-Total Amount			2292173.16
21	9% for KRIDL Charges								206409 206295.58
22	Miscellaneous and unforeseen charges	LS							1531.25 1147.64
						Grand Total Amount			2500000.00

(RupeesTwenty Five Lakhs Only)

CERTIFICATE

1) The site has been inspected and the work is found to be necessary
2 The rates adopted are as per PW,P IWTD SR of 2016-17 and data rate of Bangalore Circle
3) The provisions were made in this estimate are necessary and adequate
4) The area comes under the Bruhat Bengaluru Mahanagara Palike Limits

Assistant Engineer
Ward No.02

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P

Executive Engineer
Yelahanka Division
B.B.M.P

Administrative Approval

Accorded For 25.00 lakh Rs.
Head of A/C P-3111
CER NO : 86 Dt: 04.01.17

TA CE (YNK)

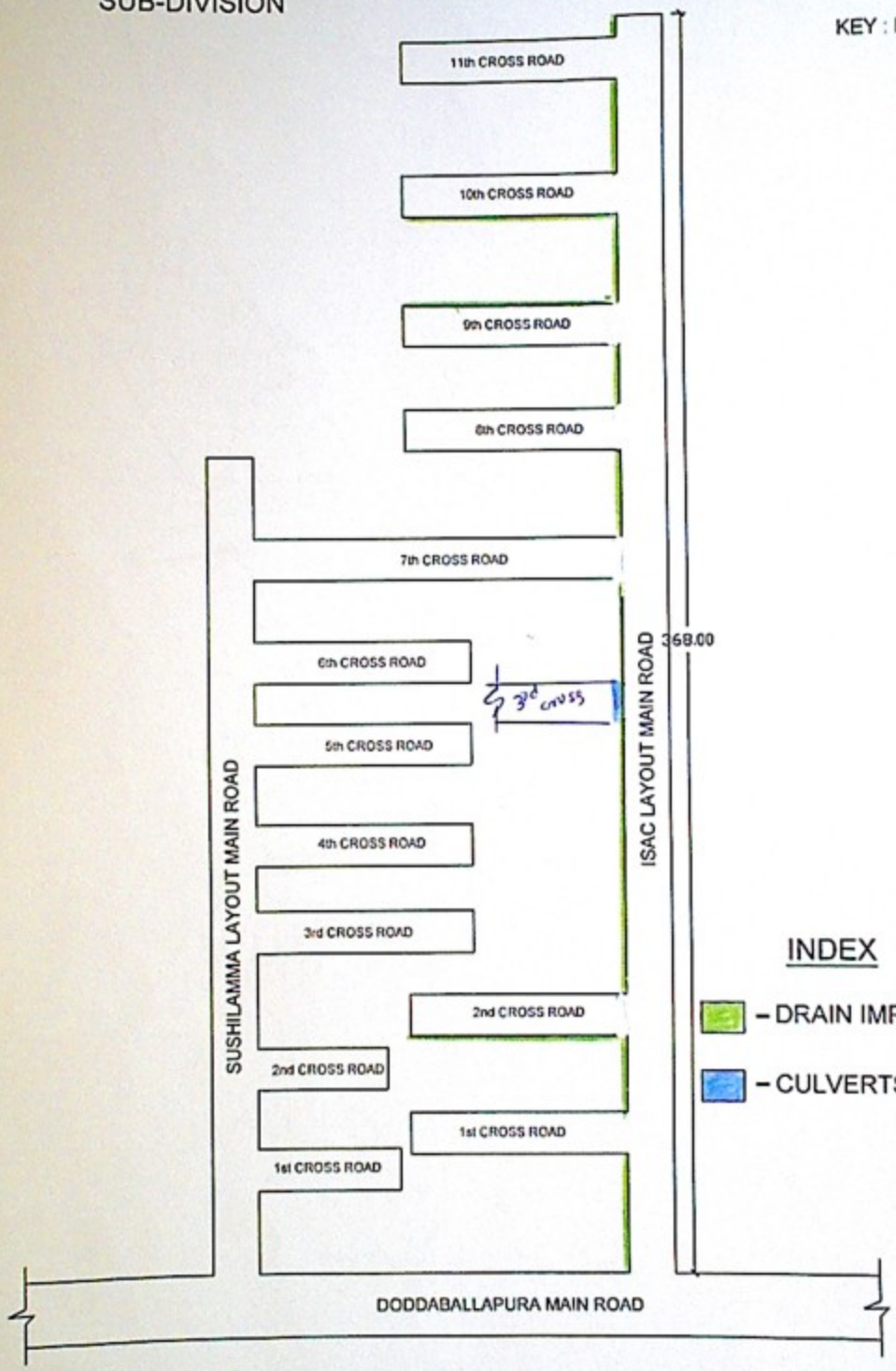
Technical Sanction

Accorded For 25.00 lakh Rs
Head of A/C P-3111.
CER NO : 95 Dt: 04.01.17

TA CE (YNK)

ME OF WORK : CONSTRUCTION OF CULVERTS AND IMPROVEMENTS OF DRAINS AT PUTTENAHALLI KHB COLONY IN WARD NO.02 OF YELAHANKA SUB-DIVISION

KEY : NOT TO SCALE



Assistant Engineer
Ward No.02
B.B.M.P

Assistant Executive Engineer
Yelahanka Sub-Division
B.B.M.P